

AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A method of preparing a cartilage, comprising:
culturing cells to form spheroids;
shaping a carrier into a desired form;
contacting at least one surface of the form with a plurality of the spheroids to permit the spheroids to adhere to the surface, wherein ~~adhering cell masses onto the surface of a~~ the carrier ~~shaped into a desired form~~ has micropores smaller than the spheroids; and
culturing the ~~spheroids~~ adhered to the surface ~~cell masses~~ under conditions which induce the spheroids to fuse to each other and to produce new cartilage tissue on the surface
differentiation of the cell masses into a cartilage tissue.
2. **(Currently Amended)** A method of preparing an artificial joint, comprising:
culturing cells to form spheroids;
forming a carrier into at least a part of a desired joint;
contacting at least one surface of said at least a part of a desired joint with a plurality of the spheroids to permit the spheroids to adhere to the surface, wherein ~~adhering cell masses onto the surface of a~~ the carrier ~~shaped into a form of a desired joint~~ has micropores smaller than the spheroids; and
culturing the ~~spheroids~~ adhered to the surface ~~cell masses~~ under conditions which induce the spheroids to fuse to each other and to produce new cartilage tissue on the surface thereby
producing an artificial joint ~~differentiation of the cell masses into a cartilage tissue.~~
3. **(Currently Amended)** The method according to claim 2, wherein the new cartilage tissue on the joint surface is formed ~~with~~ by the cells, matrices produced by the cells, or a combination thereof.
4. **(Cancelled)**
5. **(Original)** The method according to claim 1 or 2, wherein the cells are mesenchymal stem cells or chondrocytes.

6. **(Currently Amended)** The method according to claim 1 or 2, wherein the ~~culture~~ culturing of the adhered spheroids is performed *ex vivo* and in the presence of a growth factor(s).
7. **(Currently Amended)** The method according to claim 1, wherein ~~said cell masses comprise mesenchymal stem cells or chondrocytes and~~ said carrier comprises calcium triphosphate having micropores with a diameter of 10-500 microns.
8. **(Currently Amended)** The method according to claim 2, wherein ~~said cell masses comprise mesenchymal stem cells or chondrocytes and~~ said carrier comprises calcium triphosphate having micropores with a diameter of 10-500 microns.
9. **(Currently Amended)** The method according to claim 7, wherein said cells are human bone marrow-derived mesenchymal stem cells and said form ~~carrier~~ has a curved surface to which said ~~cells~~ spheroids adhere.
10. **(Currently Amended)** The method according to claim 9, wherein said ~~cells~~ spheroids are cultured in the presence of TGF-beta for a time sufficient for the cell masses to adhere onto said curved surface and to fuse to each other.
11. **(Currently Amended)** The method according to claim 8, wherein said cells are chondrocytes and said ~~carrier~~ form has a curved surface to which said ~~cells~~ spheroids adhere.
12. **(Currently Amended)** The method according to claim 11, wherein said ~~cells~~ spheroids are cultured in the presence of TGF-beta for a time sufficient for the cell masses to adhere onto said curved surface and to fuse to each other.